Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-120 (canceled)

121. (previously presented) A method of reducing or inhibiting angiogenesis in a tissue, comprising contacting $\alpha5\beta1$ integrin in the tissue with an $\alpha5\beta1$ antagonist that induces endothelial cell apoptosis and interferes with specific binding of the $\alpha5\beta1$ integrin to a ligand expressed in the tissue, thereby reducing or inhibiting angiogenesis in the tissue.

122. (previously presented) A method of reducing or inhibiting angiogenesis in a tissue in an individual, comprising administering to the individual an $\alpha5\beta1$ antagonist that induces endothelial cell apoptosis and interferes with the specific binding of $\alpha5\beta1$ integrin to a ligand expressed in the tissue, thereby reducing or inhibiting angiogenesis in the tissue in the individual.

123. (previously presented) A method of reducing the severity of a pathological condition associated with angiogenesis in an individual, comprising administering to the individual an $\alpha5\beta1$ antagonist that induces endothelial cell apoptosis and interferes with specific binding of $\alpha5\beta1$ integrin to a ligand in a tissue associated with the pathological condition, thereby reducing or inhibiting angiogenesis in the tissue, and reducing the severity of the pathological condition.

124. (new) The method of claim 121, wherein the ligand is fibronectin.

125. (new) The method of claim 121, wherein the tissue comprises ocular tissue.

126. (new) The method of claim 125, wherein the ocular tissue is selected from the group consisting of retina, macula and cornea.

127. (new) The method of claim 121, wherein the tissue comprises a neoplasm.

128. (new) The method of claim 127, wherein the neoplasm is a malignant neoplasm.

129. (new) The method of claim 128, wherein the malignant neoplasm is a metastatic malignant neoplasm.

130. (new) The method of claim 128, wherein the malignant neoplasm is a carcinoma.

131. (new) The method of claim 121, wherein the antagonist comprises a peptide.

132. (new) The method of claim 131, wherein the peptide comprises the amino acid sequence CRRETAWAC (SEQ ID NO: 1).

133. (new) The method of claim 121, wherein the antagonist is linked to a cytotoxin.

134. (new) The method of claim 133, wherein the cytotoxin is a cancer chemotherapeutic drug.

135. (new) The method of claim 122, wherein the individual is a human.

136. (new) The method of claim 123, wherein the pathological condition is a neoplasm.

137. (new) The method of claim 136, wherein the neoplasm is a malignant neoplasm.

138. (new) The method of claim 137, wherein the malignant neoplasm is a metastatic malignant neoplasm.

139. (new) The method of claim 137, wherein the malignant neoplasm is a carcinoma.

140. (new) The method of claim 139, wherein the carcinoma is selected from the group consisting of a breast carcinoma, a colon carcinoma, an ovarian carcinoma and a pancreatic carcinoma.

141. (new) The method of claim 137, wherein the malignant neoplasm is selected from the group consisting of a sarcoma, a mesothelioma, a teratocarcinoma, an astrocytoma, and a glioblastoma.

142. (new) The method of claim 123, wherein the individual is a human.

143. (new) The method of claim 123, wherein the antagonist is administered intravenously.

144. (new) The method of claim 123, wherein the antagonist is administered orally.

145. (new) The method of claim 136, wherein the antagonist is administered into a neoplasm.

146. (new) The method of claim 123, wherein the pathological condition is associated with the eye.

147. (new) The method of claim 146, wherein the pathological condition is selected from the group consisting of diabetic retinopathy and macular degeneration by neovascularization.

148. (new) The method of claim 146, wherein the antagonist is administered in the form of eye drops.

149. (new) The method of 146, wherein the antagonist is administered intravenously.

150. (new) The method of claim 146, wherein the antagonist is administered orally.

151. (new) The method of claim 123, wherein the antagonist is administered at a dose of 0:0001 to 100 mg/kg body weight.

152. (new) The method of claim 121, wherein the antagonist is a peptide and where the binding of said peptide to said $\alpha 5\beta 1$ integrin is at least a two-fold greater specificity than the binding of said peptide to an integrin other than $\alpha 5\beta 1$ integrin.

153. (new) The method of Claim 152, wherein said integrin other than $\alpha 5\beta 1$ integrin is $\alpha V\beta 3$ integrin.

154. (new) The method of claim 121, wherein the antagonist is a peptide and where the binding of said peptide to said $\alpha 5\beta 1$ integrin is at least a five-fold greater specificity than the binding of said peptide to an integrin other than $\alpha 5\beta 1$ integrin.

155. (new) The method of claim 154, wherein said integrin other than $\alpha 5\beta 1$ integrin is $\alpha V\beta 3$ integrin.

156. (new) The method of claim 121, wherein the antagonist is a peptide and where the binding of said peptide to said $\alpha 5\beta 1$ integrin is at least a ten-fold greater specificity than the binding of said peptide to an integrin other than $\alpha 5\beta 1$ integrin.

157. (new) The method of claim 156, wherein said integrin other than $\alpha 5\beta 1$ integrin is $\alpha V\beta 3$ integrin.